Chapter 2

Best Practices for Engaging Graduate Students in Problem-Based Learning

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ABSTRACT

In this chapter, the author discusses two graduate online courses and the use of the online discussion boards specifically as they were used for problem-based learning. In the first course, the instructor scaffolded the learning more closely by providing a specific case to be solved by students and by providing specific instructions. In the second course, students were in the field tutoring and were to use the online discussion board as a place to bring their problems or issues to be problem-solved by the group. In this second context, graduate students became a discourse community developed their own ways of solving problems, working sometimes as more knowledgeable others and sometimes as the one seeking assistance, and generally encouraged each other. The instructor, after providing instruction and modeling during the first course, had little role during the second course besides providing resources, monitoring, and providing occasional corrections.

INTRODUCTION

According to the National Center for Educational Statistics (NCES), “Enrollment increases in graduate and first-professional programs will persist, with graduate enrollment exceeding 2.7 million and first-professional enrollment reaching 422,000 in 2018” (Planty et al., 2009, p. 29).

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Best Practices for Engaging Graduate Students in Problem-Based Learning

This chapter examines best practices in an online teaching environment for graduate students specifically in Problem-Based Learning (PBL). The research here centered around graduate coursework for licensed educators becoming certified as literacy coaches in a Midwestern state in the United States. These graduate courses were converted from face-to-face courses to fully online courses during the 2013-2014 academic year, and they have since used a variety of eLearning techniques, with Problem-Based Learning as the primary focus.

The Research Problem

Too often instructors take face-to-face courses and simply put them online with few changes made to the teaching materials or strategies. Still, technology itself does not improve the learning or teaching experience or increase or improve student knowledge or motivation in and of itself. Nor does technology provide a magic solution for the practicalities that faculty encounter within higher learning institutions, such as growing or dwindling student numbers, limited or lack of appropriate teaching space, or an increasingly diverse and demanding student population (Laurillard, 1993).

However, digital learning environments do allow for certain advantages such as reaching those who could otherwise not access our facilities due to distance, time or other constraints. For example, of the 14 teachers involved in the courses to be discussed, only five students were within driving distance of the university and all but one student was employed full-time in an educational setting at the time the graduate students were enrolled in this course. Thus, the online learning environment allowed the graduate students the flexibility to access the class learning environment and its resources at the students’ convenience.

The online learning environment offers other advantages such as giving voice to those who might not speak during face-to-face discussions, as well as allowing for more thoughtful comments and more in-depth discussions due to having written comments rather than verbal banter. Lastly, the online learning environment encourages students to repeat material that does not make sense the first time and to review material such as videos or PowerPoints as many times as necessary until proper learning has occurred. Multimedia environments also encourage learning from both visual and aural learners and can encourage the involvement of tactile learners with hands-on components such as interactive gaming components.

In this chapter the author discusses two graduate online courses and the use of the online discussion boards specifically as they were used for Problem-Based Learning. In the first course, the instructor scaffolded the learning more closely by providing two specific cases to be solved by students by providing specific instructions and then space within the online discussion boards for students to discuss and solve the cases. In the second course, students were in the field tutoring and were to use
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